

## § 39.41

## 10 CFR Ch. I (1–1–05 Edition)

(3) The identity of the logging supervisor who is responsible for the licensed material and the identity of logging assistants present; and

(4) The location and date of use of the licensed material.

(b) The licensee shall make the records required by paragraph (a) of this section available for inspection by the Commission. The licensee shall retain the records for 3 years from the date of the recorded event.

### § 39.41 Design and performance criteria for sources.

(a) A licensee may use a sealed source for use in well logging applications if —

(1) The sealed source is doubly encapsulated;

(2) The sealed source contains licensed material whose chemical and physical forms are as insoluble and nondispersible as practical; and

(3) Meets the requirements of paragraph (b), (c), or (d) of this section.

(b) For a sealed source manufactured on or before July 14, 1989, a licensee may use the sealed source, for use in well logging applications if it meets the requirements of USASI N5.10–1968, “Classification of Sealed Radioactive Sources,” or the requirements in paragraph (c) or (d) of this section.

(c) For a sealed source manufactured after July 14, 1989, a licensee may use the sealed source, for use in well logging applications if it meets the oil-well logging requirements of ANSI/HPS N43.6–1997, “Sealed Radioactive Sources—Classification.”

(d) For a sealed source manufactured after July 14, 1989, a licensee may use the sealed source, for use in well logging applications, if—

(1) The sealed source’s prototype has been tested and found to maintain its integrity after each of the following tests:

(i) *Temperature test.* The test source must be held at  $-40^{\circ}\text{C}$  for 20 minutes,  $600^{\circ}\text{C}$  for 1 hour, and then be subject to a thermal shock test with a temperature drop from  $600^{\circ}\text{C}$  to  $20^{\circ}\text{C}$  within 15 seconds.

(ii) *Impact test.* A 5 kg steel hammer, 2.5 cm in diameter, must be dropped from a height of 1 m onto the test source.

(iii) *Vibration test.* The test source must be subject to a vibration from 25 Hz to 500 Hz at 5 g amplitude for 30 minutes.

(iv) *Puncture test.* A 1 gram hammer and pin, 0.3 cm pin diameter, must be dropped from a height of 1 m onto the test source.

(v) *Pressure test.* The test source must be subject to an external pressure of  $1.695 \times 10^7$  pascals [24,600 pounds per square inch absolute].

(e) The requirements in paragraphs (a), (b), (c), and (d) of this section do not apply to sealed sources that contain licensed material in gaseous form.

(f) The requirements in paragraphs (a), (b), (c), and (d) of this section do not apply to energy compensation sources (ECS). ECSs must be registered with the Commission under § 32.210 of this chapter or with an Agreement State.

[65 FR 20345, Apr. 17, 2000]

### § 39.43 Inspection, maintenance, and opening of a source or source holder.

(a) Each licensee shall visually check source holders, logging tools, and source handling tools, for defects before each use to ensure that the equipment is in good working condition and that required labeling is present. If defects are found, the equipment must be removed from service until repaired, and a record must be made listing: the date of check, name of inspector, equipment involved, defects found, and repairs made. These records must be retained for 3 years after the defect is found.

(b) Each licensee shall have a program for semiannual visual inspection and routine maintenance of source holders, logging tools, injection tools, source handling tools, storage containers, transport containers, and uranium sinker bars to ensure that the required labeling is legible and that no physical damage is visible. If defects are found, the equipment must be removed from service until repaired, and a record must be made listing: date, equipment involved, inspection and maintenance operations performed, any defects found, and any actions taken to correct the defects. These